Strategy & Policy Issue - Airbus vs. Boeing

Team 3

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Corporate Overview

Boeing

Airbus

Two main strategic directions

Strategy with Airbus – The A380

Strategy with Boeing – The 7E7

Outlook

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A brief look at Boeing Corporate Overview



- William Boeing founded Boeing Company in 1908 in Seattle with the purchase of a shipyard area
- Boeing 707 Innovator After Comet Failure
- Deregulation in 1978 triggered development of the 747 jumbo jet for large capacity, large volume, and long distance flights
- Sonic cruiser as disruptive aircraft concept was dropped in 2002 due to little market demand and technological struggles
- Today: Diversified fleet with small, mid-sized and jumbo aircrafts with 7E7 as the future concept









A brief look at Airbus Corporate Overview

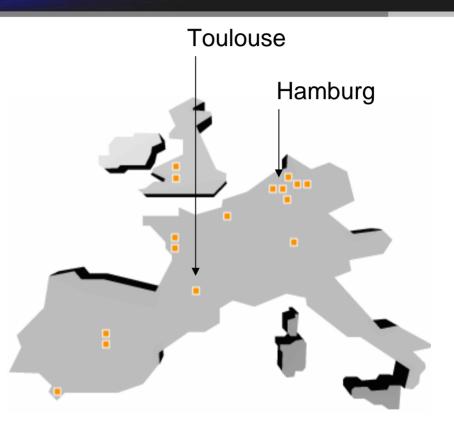
- Established in 1970 as an European consortium of French (Aerospatiale) and German (Deutsche Aerospace) companies
- Spain (CASA) joined in 1971
- United Kingdom (British Aerospace) joined in 1979
- → Co-operation to compete against the dominating U.S. aviation industry



Airbus manufacturing Corporate Structure

Spots all over Europe

- Germany
- France
- Spain
- United Kingdom
- 2 major assembly lines:
 - Toulouse, France (A320, A300/A310 and A330/A340)
 - Hamburg, Germany (A318, A319 and A32)



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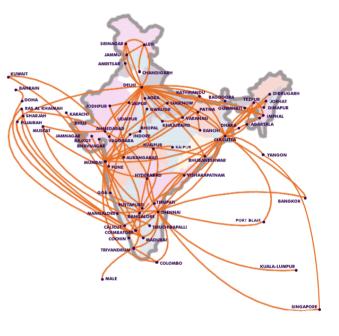
Strategy with Boeing – The 7E7

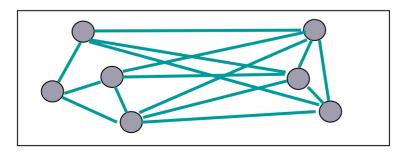
Outlook

The Point-2-Point principle Two main strategic directions

What is Point-2-Point?

- Direct city to city connection
- Carriers without central hub
- Generally small to mid-sized aircrafts
- Less frequent connections

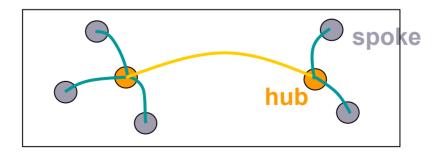




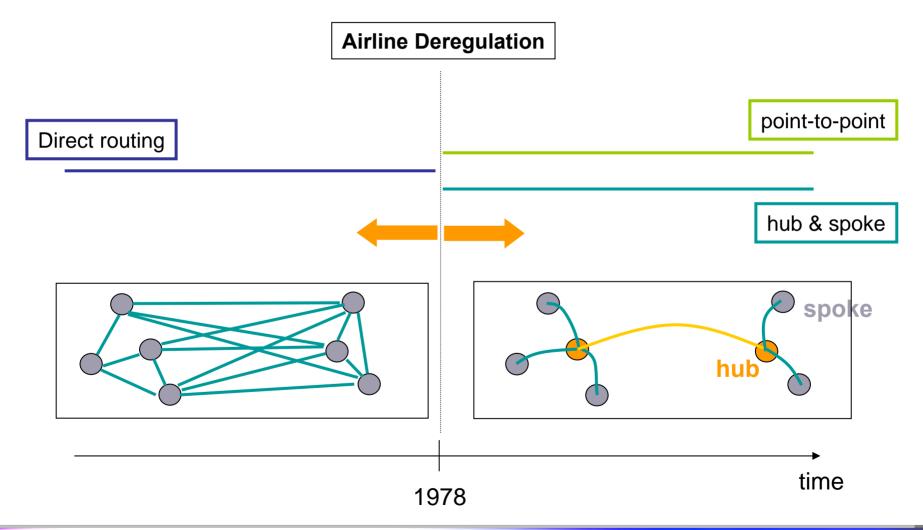
The Hub-N-Spoke principle Two main strategic directions

What is Hub-N-Spoke?

- Major centralized hubs integrate regional spoke airports
- Frequent connections between hubs
- Hubs can serve continents, countries or geographical regions
- Airports: LHR, NYC, FRA, DEN, ...



Historical development of the two principles Timeline



Point-2-Point vs. Hub-N-Spoke Comparison of the two principles

hub & spoke	point-to-point
hub: central airport that flights are routed through spoke: routes that planes take out of the hub	direct route concept; airlines fly directly to every airport
 + efficient economic utilization - lots of transfer and layovers - increased travel time 	+ lowest travel time + homogeneous fleet - Infrastructural disadvantages
conventional airlines	no-frills airlines (Southwest)

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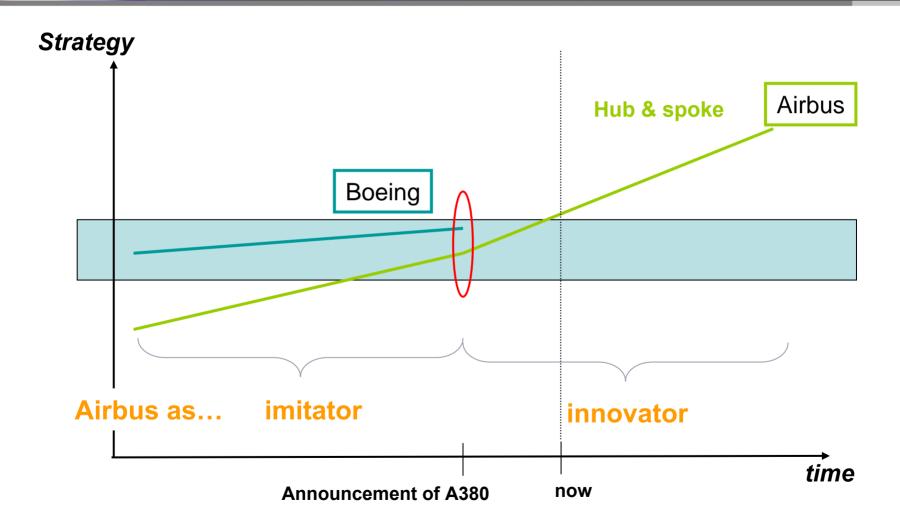
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The development of strategic positions Differences in Strategy



The A380 – the initiator of a new era Strategy of Airbus

Specifications:

Passenger capacity	555
Operating cost-savings	15-20%
Increased distance capacity	10-15%
travel distance	14,800 km
Gross weight maximum	540,000 kg



- Reduced fuel consumption Reduced noise Reduced pollution/fumes output 49% more usable passenger space
- **▶** Decision for: *Hub-N-Spoke*



Forecasting the Future Strategy of Airbus

Market Assumptions made by Airbus

- Demand for air travel increases with 5% per year
- Asia-Pacific market uprising
 - → new market demands for efficient, long-range airplanes to link region to Northamerica & Europe
- Market is price driven
 - → demand for efficient airplanes
- 40% of actual fleet will retire
- Growing urban population
 - → high passenger volume; passenger/ flight

Characteristical regional development Strategy of Airbus

North America	Europe	Asia-Pacific
 fragmentized market with major hubs to serve 	highly fragmentized market	 concentrated market 25% population density in cities
mature market	Growing market	 major spots with high population density
• most airplanes	• most deliveries	• fastest growing market

The Global Market Forecast – 20 years Strategy of Airbus

Key Parameters

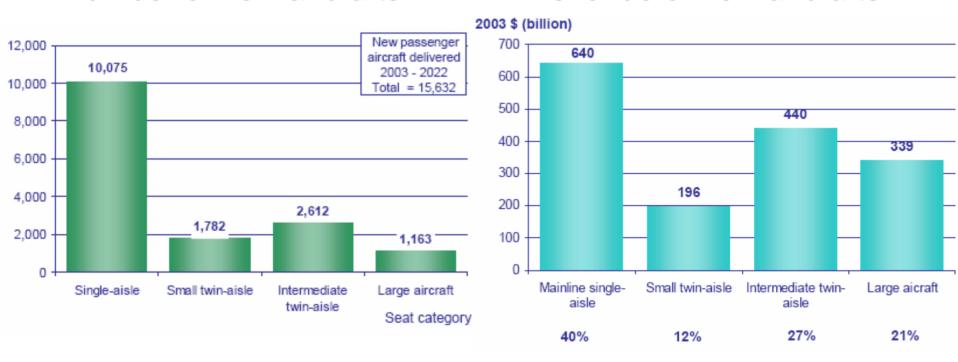
Passenger a/c 100 seats and above	End 2002	End 2022
World RPKs (billion)	3,165.7	8,473.1
World ASKs (billion)	4,514.2	11,407.3
Number of aircraft	10,789	20,554
Number of installed seats	1,944,992	4,527,891
Number of departures (000)	15,864.8	31,510.0
Seats per departure	163	200
Average flight distance (km)	1,437	1,516
Block hours per aircraft per year	3,450	3,739

Source: Airbus forecast

Melting the profit pool Strategy of Airbus

Number of new aircrafts

Revenue of new aircrafts



Higher profit margins for large aircrafts

Source: Airbus forecast

Estimating future demand Strategy of Airbus

Most aircraft will fly from airports in the US & Europe – with Tokyo's Narita also in the Top Ten



from just the Top Ten airports

Source: Airbus forecast

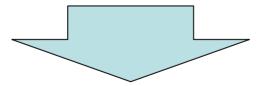
Interpreting the forecast Strategy of Airbus

We have seen...

... an uprising global market...

...with major hubs to serve...

... causing high demand for new large-scale aircrafts...



The A380 – the plane of the future?

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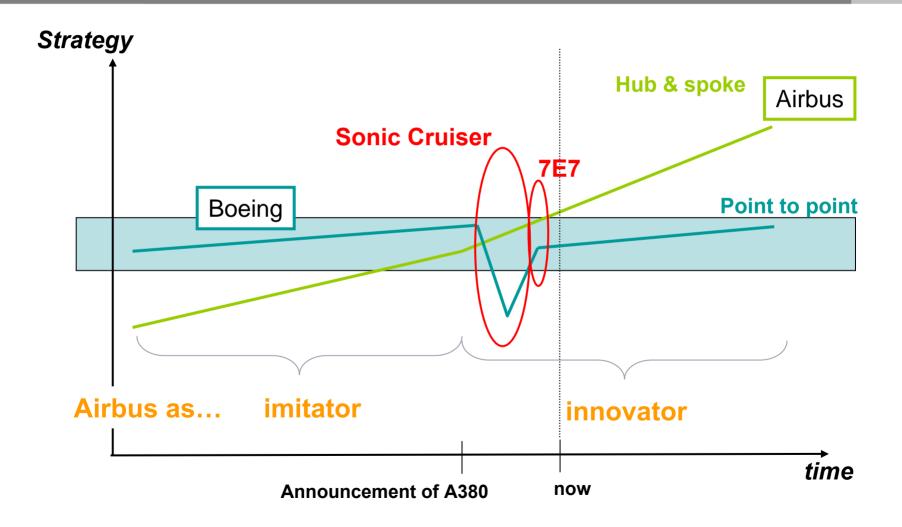
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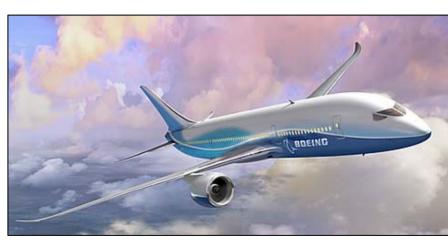
The development of strategic positions Differences in Strategy



Boeing's answer to the A380 – The 7E7 Strategy of Boeing

- The 7E7 Dreamliner is Boeing's answer to the strategy of Airbus
- The 7E7 concept is different from the A380:
 - Mid-sized aircraft
 - Long-range (up to 8900 miles) and fast (0.85 mach)
 - High Operating Efficiency
 - High Operating Flexibility
 - Environmentally Compatible
 - High Passenger Comfort
 - ➤ Decision for: Point-2-Point





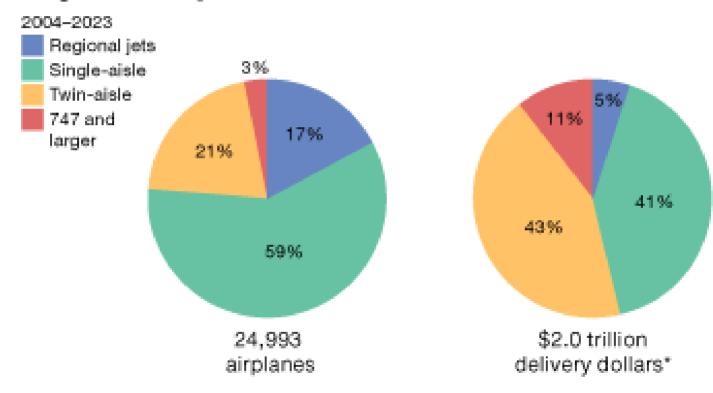
Reasons for the 7E7 Strategy of Boeing

Evolution rather than Revolution

- Need for differentiation from revolutionizing A380 concept and lessons learned from the Sonic Cruiser
- Biggest cities in US and Europe cover only ~15% of entire population → This aspect of fragmentation will also dominate Asian market demand for Point-2-Point compatible aircrafts
- Generating profit: Focus also on internal cost-structure
- → Lean Enterprise Initiative for operational excellence

Boeing's view of the future Strategy of Boeing

Single-Aisle Airplanes Dominate Future Deliveries



Source: Boeing forecast

→ Boeing expects a trend towards Point-2-Point

^{*} In year 2003 dollars

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The critical factors for future success Outlook

- Factors that cannot be influenced:
 - Global and regional economical development (with their discrepancies)
 - Demographical development
 - Natural resources
- Co-existence of Hub-N-Spoke and Point-2-Point is likely
- Factors that can be influenced:
 - Corporate strategy and product portfolio
 - Quality and objectiveness of forecasting
 - Operational excellence: internal cost-structure
- ⇒ Future profit is dependent of how successful a company deals with these factors

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What is the essence of this strategy issue? Conclusion

- The move from imitator to innovator is possible → Airbus is successful due to its strategic repositioning
- Companies have to be aware of their strategic positions within an industry
- Strategy as a function of forecasting → predicted global market developments are determining a company's strategy
- ⇒ Forecasting with high impact on corporate strategy
- Strategy characteristics → Airbus' strategy with high risk whereas Boeing with more conventional strategy
- ⇒ Company has to be aware of the risk-rate of its strategy
- Strategic failure and lessons learned → Boeing's failure with the Sonic cruiser and the 7E7 as a consequence
- ⇒ Company strategy has to build upon experience and integrate lessons learned

"This issue is not which manufacturer has the newest airplane. It is not which airplane has the most composite materials or the most aluminum alloys. Nor is it whether the pilots are looking at liquid crystal displays rather than CRTs. The question is: have we met customers' needs and added value?"

Phil Condit, Boeing CEO

